THE INVENTION CLAIMED IS:

1. A sensing system adapted to determine a position of an edge of a substrate relative to a stage that supports the substrate, comprising:

a plurality of probes arranged in a spaced relation around a stage that is adapted to support a substrate, wherein each probe includes a detection portion that is adapted to:

move from a known starting position toward an edge of the substrate that is supported by the stage;

detect the edge of the substrate while the substrate is supported by the stage;

generate a detection signal following said detection; and

stop moving toward the edge of the substrate following said detection; and

a controller coupled to the plurality of probes and adapted to determine a position of the edge of the substrate relative to the stage based on the known starting position of each detection portion and based on the detection signal generated by each detection portion.

2. The sensing system of claim 1, wherein each detection portion comprises a switch adapted to contact the edge of the substrate and generate a detection signal upon said contact.

3. The sensing system of claim 1, wherein each of the detection portions is adapted to move toward the edge of the substrate along a straight-line path.

4. The sensing system of claim 3, wherein the plurality of probes resides in a common plane containing the straight-line paths of the detection portions.

5. The sensing system of claim 4, wherein the plurality of probes includes a first and a second probe positioned along a first line within the common plane when the first and second probes are retracted.

6. The sensing system of claim 5, wherein the plurality of probes includes a third and a fourth probe positioned at an opposite side of the stage from the first and second probes along a second line within the common plane when the third and fourth probes are retracted.

7. The sensing system of claim 6, wherein the plurality of probes includes a fifth probe positioned along a third line within the common plane and approximately perpendicular to the first and second lines when the fifth probe is retracted.

8. The sensing system of claim 7, wherein the plurality of probes includes a sixth probe positioned at an opposite side of the stage from the fifth probe along a fourth line within the common plane and approximately perpendicular to the first and second lines when the sixth probe is retracted.

9. The sensing system of claim 5, wherein the plurality of probes includes a third and a fourth probe positioned along a second line within the common plane and approximately perpendicular to the first line when the third and fourth probes are retracted.

10. The sensing system of claim 1, further comprising a plurality of drive mechanisms, each drive mechanism coupled to a respective one of the probes and

adapted to move the respective one of the probes toward and away from the edge of the substrate.

11. The sensing system of claim 10 wherein each drive mechanism comprises a motor.

12. The sensing system of claim 11, wherein the controller is coupled to each of the plurality of motors, and for each of the plurality of probes the controller is adapted to:

direct the motor coupled to the probe to move the detection portion of the probe toward the edge of the substrate;

receive the detection signal generated by the detection portion of the probe when the detection portion detects the edge of the substrate; and

in response to the received detection signal, direct the motor coupled to the probe to stop movement of the detection portion of the probe toward the edge of the substrate.

13. The sensing system of claim 12 wherein:

the detection portion of each probe is further adapted to retract from the stage so as to allow the substrate to be loaded onto and removed from the stage; and

the controller is further adapted to direct each motor to retract the detection portion of the probe coupled to the motor to the known starting position of the detection portion.

14. The sensing system of claim 12 wherein the controller is further adapted to:

determine a distance the detection portion of each probe traveled from the known starting position of the

detection portion to a position at which the detection portion detected the edge of the substrate; and

determine the position of the edge of the substrate relative to the stage based on the distance traveled by the detection portion of each probe.

15. The sensing system of claim 14 wherein the controller is further adapted to determine straightness of the substrate relative to the stage based on a plurality of the determined distances.

16. A probe, comprising:

a detection portion adapted to:

move from a known starting position toward an edge of a substrate that is supported by a stage;

detect the edge of the substrate while the substrate is supported by the stage;

generate a detection signal following said detection; and

stop moving toward the edge of the substrate following said detection;

a drive mechanism adapted to move the detection portion toward the stage; and

a controller coupled to the detection portion and the drive mechanism, and adapted to determine a position of the edge of the substrate relative to the stage based on the known starting position of the detection portion and based on the detection signal generated by the detection portion.

17. The probe of claim 16 wherein the controller is further adapted to:

direct the drive mechanism to move the detection portion of the probe toward the edge of the substrate;

receive the detection signal generated by the detection portion of the probe when the detection portion detects the edge of the substrate; and

in response to the received detection signal, direct the drive mechanism to stop movement of the detection portion of the probe toward the edge of the substrate.

18. The probe of claim 16 wherein the detection portion comprises a switch adapted to contact the edge of the substrate and generate a detection signal upon said contact.

19. The probe of claim 16 wherein:

the detection portion is further adapted to retract from the stage so as to allow the substrate to be loaded onto and removed from the stage; and

the controller is further adapted to direct the drive mechanism to retract the detection portion to the known starting position of the detection portion.

20. A method of determining a position of an edge of a substrate relative to a stage that supports the substrate, comprising:

providing a plurality of detectors in a spaced relation around a stage that is adapted to support a substrate;

directing each detector to move from a known starting position toward the edge of the substrate;

detecting the edge of the substrate with each detector;

generating a detection signal from each detector following detection of the edge of the substrate by the detector;

directing each detector to stop moving toward the edge of the substrate following detection of the edge of the substrate by the detector; and

determining a position of the edge of the substrate relative to the stage based on the known starting position of each detector and based on the detection signal generated by each detector.

21. The method of claim 20 wherein:

directing each detector to move from a known starting position toward the edge of the substrate comprises directing a motor to move the detector toward the edge of the substrate; and

directing each detector to stop moving following detection of the edge of the substrate by the detector comprises:

receiving the detection signal generated by the detector when the detector detects the edge of the substrate; and

in response to the received detection signal, directing the motor to stop movement of the detector.

22. The method of claim 20 further comprising retracting the plurality of detectors to the known starting positions of the detectors.

23. The method of claim 20 wherein determining a position of the edge of the substrate relative to the stage based on the known starting position of each detector and based on the detection signal generated by each detector comprises:

determining a distance each of the plurality of detectors traveled from the known starting position of

the detector to a position at which the detector detected the edge of the substrate; and

determining the position of the edge of the substrate relative to the stage based on the distance traveled by each detector.

24. The method of claim 23 further comprising determining straightness of the substrate relative to the stage based on a plurality of the distances.